

UNITED STATES DISTRICT COURT  
DISTRICT OF RHODE ISLAND

THE HARTFORD INSURANCE	:	
COMPANY, as Subrogee	:	
	:	
v.	:	C.A. No. 06-362S
	:	
GENERAL ELECTRIC COMPANY,	:	
et al.	:	

EUGENIA CARVALHAL	:	
	:	
v.	:	C.A. No. 07-007S
	:	
GENERAL ELECTRIC COMPANY,	:	
et al.	:	

**REPORT AND RECOMMENDATION**

Lincoln D. Almond, United States District Court

Before the Court is Defendants' Motion to Preclude the Testimony of Plaintiffs' Expert Witnesses and for Summary Judgment. (Document No. 42).<sup>1</sup> This Motion has been referred to me for preliminary review, findings and recommended disposition. 28 U.S.C. § 636(b)(1)(B); LR Cv 72. Oral argument was requested by the parties and held on September 14, 2007. For the reasons discussed below, I recommend that Defendants' Motion be GRANTED.

**I. Background**

These consolidated cases arise out of a house fire that occurred on February 27, 2004 in East Providence. In C.A. No. 06-362S, the homeowners' insurer, The Hartford Insurance Co. (the

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<sup>1</sup> The same Motion is docketed as No. 17 in the Consolidated Case, C.A. No. 07-007S.

“Hartford”), brings a subrogation claim against the manufacturer, Midea U.S.A., Inc. (“Midea”), and distributor, General Electric Co. (“GE”), of a GE hot/cold water dispenser. Hartford alleges that the water dispenser was defective and that the defect caused the house fire. In order to prevail on any of its claims, Hartford agrees that it must “prove that the water dispenser was defective and unreasonably dangerous and that the defect was the proximate cause of its damages.” Document No. 47 at 23. Hartford’s claimed damages are the payments (alleged to be in excess of \$237,000.00) made to the insureds for fire damage. The consolidated case (C.A. No. 07-007S) is a tag-along case against Midea and GE brought by one of the insureds seeking compensation for her damages arising out of the fire which were not covered or reimbursed by the insurer.

Discovery in these cases has closed. During discovery, Plaintiffs identified three experts expected to testify on their behalf as to the origin and cause of the fire. Mr. Hossein Davoodi, a Certified Fire and Explosion Investigator, was engaged by Plaintiffs as their fire origin expert. Mr. Michael Cooney, a Metallurgical Engineer, and Mr. Ara Nalbandian, a Mechanical Engineer (both of Thielsch Engineering), were jointly engaged by Plaintiffs as their fire cause experts. Mr. Davoodi opines that the fire originated in the kitchen at the location of the water dispenser. Mr. Cooney and Mr. Nalbandian opine that the fire was caused by a defect in the water dispenser.

Defendants contend that the opinions of Plaintiffs’ experts do not pass muster under the standards established by the Supreme Court in Daubert and Kumho Tire and should be excluded. If such expert evidence is excluded from evidence, Defendants contend that Plaintiffs cannot establish a prima facie case for any of their product liability claims, and the Court should enter summary judgment in their favor as to all of Plaintiffs’ claims.

## II. Summary Judgment Standard

A party shall be entitled to summary judgment “if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law.” Fed. R. Civ. P. 56(c). When deciding a motion for summary judgment, the Court must review the evidence in the light most favorable to the nonmoving party and draw all reasonable inferences in the nonmoving party’s favor. Cadle Co. v. Hayes, 116 F.3d 957, 959 (1<sup>st</sup> Cir. 1997).

Summary judgment involves shifting burdens between the moving and the nonmoving parties. Initially, the burden requires the moving party to aver “an absence of evidence to support the nonmoving party’s case.” Garside v. Osco Drug, Inc., 895 F.2d 46, 48 (1<sup>st</sup> Cir. 1990) (quoting Celotex Corp. v. Catrett, 477 U.S. 317, 325, 106 S. Ct. 2548, 2554, 91 L. Ed. 2d 265 (1986)). Once the moving party meets this burden, the burden falls upon the nonmoving party, who must oppose the motion by presenting facts that show a genuine “trialworthy issue remains.” Cadle, 116 F.3d at 960 (citing Nat’l Amusements, Inc. v. Town of Dedham, 43 F.3d 731, 735 (1<sup>st</sup> Cir. 1995); Maldonado-Denis v. Castillo-Rodriguez, 23 F.3d 576, 581 (1<sup>st</sup> Cir. 1994)). An issue of fact is “genuine” if it “may reasonably be resolved in favor of either party.” Id. (citing Maldonado-Denis, 23 F.3d at 581).

To oppose the motion successfully, the nonmoving party must present affirmative evidence to rebut the motion. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 256-57, 106 S. Ct. 2505, 2514-2515, 91 L. Ed. 2d 202, (1986). “Even in cases where elusive concepts such as motive or intent are at issue, summary judgment may be appropriate if the nonmoving party rests merely upon conclusory allegations, improbable inferences, [or] unsupported speculation.” Medina-Munoz v.

R.J. Reynolds Tobacco Co., 896 F.2d 5, 8 (1<sup>st</sup> Cir. 1990). Moreover, the “evidence illustrating the factual controversy cannot be conjectural or problematic; it must have substance in the sense that it limns differing versions of the truth which a factfinder must resolve.” Id. (quoting Mack v. Great Atl. & Pac. Tea Co., 871 F.2d 179, 181 (1<sup>st</sup> Cir. 1989)). Therefore, to defeat a properly supported motion for summary judgment, the nonmoving party must establish a trialworthy issue by presenting “enough competent evidence to enable a finding favorable to the nonmoving party.” Goldman v. First Nat’l Bank of Boston, 985 F.2d 1113, 1116 (1<sup>st</sup> Cir. 1993) (citing Anderson, 477 U.S. at 249).

### **III. Discussion**

In Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579 (1993), the Supreme Court established four factors for the trial court to weigh in assessing the admissibility of expert scientific evidence under Fed. R. Evid. 702.<sup>2</sup> These factors are “(1) whether the theory or technique can be and has been tested; (2) whether the technique has been subject to peer review and publication; (3) the technique’s known or potential rate of error; and (4) the level of the theory or technique’s acceptance within the relevant discipline.” United States v. Mooney, 315 F.3d 54, 62 (1<sup>st</sup> Cir. 2002) (citing Daubert, 509 U.S. at 593-594). In Kumho Tire Co. v. Carmichael, 526 U.S. 137, 141 (1999), the Supreme Court held that this gate-keeping function also applies to technical and other specialized knowledge. “Although the approach is flexible by its nature (after all, expert testimony and the peculiar facts of each case so demand), the overarching concern is on the ‘evidentiary relevance and

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<sup>2</sup> Rule 702, Fed. R. Evid., provides that

[i]f scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

reliability’ of the proposed testimony.” Seahorse Marine Supplies, Inc. v. Puerto Rico Sun Oil Co., 295 F.3d 68 (1<sup>st</sup> Cir. 2002) (citing Daubert, 509 U.S. at 595). “If proffered expert testimony fails to cross Daubert’s threshold for admissibility, a district court may exclude that evidence from consideration when passing upon a motion for summary judgment.” Cortes-Irizarry v. Corporacion Insular De Seguros, 111 F.3d 184, 188 (1<sup>st</sup> Cir. 1997) (citations omitted). See also Margaret A. Berger, Procedural Paradigms for Applying the Daubert Test, 78 Minn. L. Rev. 1345, 1373-1374 (“The Court may not need to hear testimony from the experts if the methodological issues have been adequately explored at depositions.”).

#### **A. The Origin Expert**

Plaintiffs have identified Mr. Hossein Davoodi, PE, CFEI, as their fire origin expert. He opines that the house fire in question “originated at the southeast side of the kitchen where the water dispenser was located.” Document No. 44, Ex. C-1 at 1. Mr. Davoodi based his origin opinion on an “examination of burn patterns and vector analyses at th[e] scene, examination of the [water dispenser], witness accounts, and information currently available....” Id. Defendants argue that Mr. Davoodi failed to adequately investigate and document the fire scene; and failed to document, collect, evaluate and retain evidence that was key to his origin opinion. Plaintiffs argue, in response, that Mr. Davoodi’s qualifications to offer a fire origin opinion are “impeccable” and his methodology for determining fire origin is accepted and commonly used within the fire investigation community based on “basic physics principles.” (Document No. 47-1 at 15). Plaintiffs contend that any claimed failure by Mr. Davoodi to properly document the scene or collect evidence goes to the weight of his opinion, not its admissibility. Id.

In connection with my consideration of this issue, I have thoroughly reviewed Mr. Davoodi's resume, his expert report (with exhibits) and the substantial portions of his deposition testimony submitted by the parties. Based upon such review, Defendants have not convinced me that they are entitled, under Daubert, to an order precluding expert testimony from Mr. Davoodi. At the hearing, Defendants' counsel conceded that the "hardest part" of his argument is to establish that Mr. Davoodi is not qualified to render an expert opinion on the origin of the fire. I agree and find that Mr. Davoodi is qualified to testify as to the origin of the fire.

Mr. Davoodi's opinion is not "unsupported speculation" as argued by Defendants. First, Mr. Davoodi is more than competent to render a fire origin opinion. He has a Master's Degree in fire protection engineering and is a Registered Professional Engineer in the field of fire protection in three states. Further, he has been certified as a Fire and Explosion Investigator by the National Association of Fire Investigators and has investigated over 400 fires in his nearly twenty-year professional career. Davoodi Dep. at 35.

Defendants' next line of attack goes to the methodology of Mr. Davoodi's fire origin investigation and his conformance with NFPA 921. NFPA 921 is a guide for fire and explosion investigations published by the National Fire Protection Association. Mr. Davoodi conducted a fire scene examination on March 3, 2004 (less than a week after the fire) and documented his examination with photographs and several burn-pattern diagrams.<sup>3</sup> From a review of his expert report and deposition testimony, it is clear that Mr. Davoodi primarily relied upon the documented burn patterns to arrive at his opinion regarding the origin of the fire. Davoodi Report at 8.

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<sup>3</sup> NFPA 921 has an entire chapter devoted to fire patterns (Chapter 6) and, in the Chapter's introductory section (6.1.1), notes that "[o]ne of the major objectives of a fire scene examination is the recognition, identification, and analysis of fire patterns...in an attempt to trace fire spread, identify areas and points of origin, and identify the fuels involved." Document No. 48, Ex. 4 at 921-30.

Defendants contend that Mr. Davoodi failed to properly take and record measurements, failed to prepare accurate and “to scale” diagrams and failed to retain and properly rule out a coffee pot as a potential source of the fire. These arguments, however, are more appropriately aimed at the weight to be accorded Mr. Davoodi’s opinion and not its admissibility. Although the First Circuit has approved the use of Daubert in connection with a motion under Fed. R. Civ. P. 56, it has cautioned that “the Daubert regime should be employed only with great care and circumspection at the summary judgment stage.” Cortes-Irizarry, 111 F.3d at 188. “The ultimate credibility determination and the [expert] testimony’s accorded weight are in the jury’s province.” Seahorse Marine, 295 F.3d at 81 (citing Mitchell v. United States, 141 F.3d 8, 16-17 (1<sup>st</sup> Cir. 1998)). “Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” Daubert, 509 U.S. at 596.

#### **B. The Cause Experts**

Plaintiffs’ cause experts, Mr. Ara Nalbandian and Mr. Michael Cooney, issued a joint report on September 29, 2004. At the hearing, Hartford’s counsel asserted that these experts “place th[e] defect directly in the manufacturer’s inclusion of chloride-rich insulation around the hot water tank” of the water dispenser. In particular, the experts identified, through testing, “the presence of high chlorine levels in the insulation on the hot water tank/heater assembly.” Nalbandian/Cooney Report at 7. This led to “cracking and corrosion pitting” of the stainless steel hot water tank and resulting water leakage. Id. at 8, 9.

Defendants do not contest the admissibility of this portion of the Nalbandian/Cooney expert opinion. Defendants do, however, contest the admissibility of their opinion that this water tank defect caused the fire in question.

The starting point to evaluate the Nalbandian/Cooney opinion is their detailed expert report dated September 29, 2004. The report concludes that “[b]ased upon the results of the inspection and examinations, it is apparent that improper design and assembly of the GE water dispenser, using insulation with an extensive chloride content, contributed to and/or caused the failure of the unit and the resultant fire.” Nalbandian/Cooney Report at 9. From their review of the water dispenser, they noted “[a] significant accumulation of corrosion product/deposit was evident at the temperature sensors” and that “[e]vidence indicative of electrical arcing or shorts was not observed.” Id. at 4. (emphasis added). Mr. Nalbandian and Mr. Cooney then articulated a detailed opinion as to exactly how the insulation defect/water leak caused the fire. They opined that:

[t]he oxide generated by the corrosion reaction would have acted as an insulator and prevented proper functioning of the sensors. If the sensors did not send the proper signal back to the relay switch to indicate that the water in the tank had reached its set point, the heater would have remained on continuously. The heat generated from the heater being on continuously combined with water leaking from the cracks and corrosion pits at the top of the hot water tank could have generated enough heat to ignite combustible plastic in the water dispenser or adjacent combustible material in the kitchen.

Id. at 8.

In their report, Mr. Nalbandian, a Mechanical Engineer, and Mr. Cooney, a Metallurgical Engineer, detailed the scientific testing they conducted to form their opinion that the inclusion of high chloride external insulation on the hot water tank was a defect and led to corrosion and cracking of the tank. Their report does not, however, provide similar scientific support for their heat



sensor malfunction theory. Mr. Cooney conceded at his deposition that he was not an “electrical expert,” Cooney Dep. at 104, and there is nothing in Mr. Nalbandian’s resume or deposition testimony to suggest he is an electrical expert.

It is apparent from a close review of Mr. Nalbandian’s and Mr. Cooney’s deposition testimony that they could not support or defend their causation opinion. For instance, Mr. Nalbandian agreed that the “sequence of events” leading to the fire was that “water leaked out of the tank, it corroded the sensors, the sensors malfunctioned and allowed the heating unit to run continually.” Nalbandian Dep. at 146. When asked the scientific basis for his opinion as to the sensors, Mr. Nalbandian testified that “[w]e didn’t say they didn’t properly operate” but that corrosion from the leakage did not allow them “to properly function, and in the view of not being able to properly function, you would have the resultant fire.” Id. at 153-154. Mr. Nalbandian was not, however, “aware of the details” as to how the heat sensors worked, id. at 156, did not determine “how hot the heating element” would get if it ran continuously, id. at 134,<sup>4</sup> and did not determine the fire ignition point of the water dispenser components. Id. at 147-149. Similarly, when asked about the opinion that “the heater coil generated sufficient heat to cause localized burning,” Mr. Cooney had to back track and testified that “[i]t should be amended to say the heating system, not necessarily the heater coil.” Cooney Dep. at 101. Mr. Cooney was also unable to provide any concrete support for the heat sensor theory, id. at 139-144, and could not identify to a reasonable degree of scientific certainty either a heat source or fuel source (excluding oxygen). Id. at 142-143.

These deficiencies forced Hartford’s counsel to concede at argument that “at this point we need to forget about the heat sensor.” Plaintiffs then attempted to rehabilitate the

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<sup>4</sup> Although the water dispenser was heavily damaged in the fire, it is undisputed that the experts had access to certain exemplar water dispensers, but did not conduct further testing.

Nalbandian/Cooney cause opinion by casting a broader net and arguing that a water leak in an electrical device will necessarily cause a fire. As support, Hartford's counsel essentially asked me to take judicial notice of this analytical leap by arguing at the hearing, without citation to any supporting authority as required by Fed. R. Evid. 201(d), that it is a "basic tenet of any material performance academia that electrical components when exposed to corrosion and water will short and cause fires."

In Daubert, the Supreme Court noted that scientific knowledge "connotes more than subjective belief or unsupported speculation." 509 U.S. at 590. "[N]othing in either Daubert or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the ipse dixit of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered." Ruiz-Troche v. Pepsi Cola of P.R. Bottling Co., 161 F.3d 77, 81 (1<sup>st</sup> Cir. 1998) (citation and internal quotation marks omitted). This is such a case. While I am cognizant of the First Circuit's cautionary instruction regarding the use of Daubert's gate-keeping regime in connection with summary judgment, I am also convinced that this is one of the "clearcut cases" in which it is appropriate to do so. See Cortes-Irizarry, 111 F.3d at 188 ("given the complex factual inquiry required by Daubert, courts will be hard-pressed in all but the most clearcut cases to gauge the reliability of expert proof on a truncated record"). In its Fed. R. Civ. P. 26(a)(2)(B) expert reports, Hartford informed Defendants that Mr. Cooney and Mr. Nalbandian would testify that "the water dispenser was improperly designed and/or assembled so that the heater coil...generated sufficient heat to cause localized burning and the resulting fire." Document No. 46, Exs. B and C at 1-2. See also Dunkin' Donuts Inc. v. Patel, 174 F. Supp. 2d 202, 211 (D.N.J. 2001) ("The test of a report is whether it is sufficiently complete, detailed and in

compliance with the Rules so that surprise is eliminated, unnecessary depositions are avoided, and costs are reduced.”). In view of the clear focus in the expert disclosure and report on the “absence of proper temperature sensor response,” it certainly came as a surprise to me when Hartford’s counsel shifted gears at the hearing and told me to “forget about the heat sensor.” If I forget about the heat sensor, then I must also forget about the only theory of causation proffered by Mr. Cooney and Mr. Nalbandian in their report. The bottom line is that their expert report did not provide a scientific basis for the heat sensor causation theory, and the theory did not withstand scrutiny when examined at their depositions. It is no more than unsupported speculation, and is thus inadmissible.

Accordingly, I recommend that the District Court preclude testimony from Plaintiffs’ cause experts and GRANT Defendants’ Motion for Summary Judgment. In the absence of such expert evidence and in view of the expiration of the period for expert witness disclosure and discovery, Plaintiffs have not otherwise identified competent evidence upon which a reasonable jury could find that the alleged defect in the water dispenser was the proximate cause of the house fire in question. Without such evidence, the jury could only impermissibly speculate as to the actual cause of the fire. Plaintiffs have simply not made a sufficient showing under Fed. R. Civ. P. 56(c) to preclude the entry of summary judgment for Defendants.

#### **IV. Conclusion**

For the foregoing reasons, I recommend that the District Court GRANT Defendants’ Motion to Preclude the Testimony of Plaintiffs’ Expert Witnesses and for Summary Judgment. (Document No. 42).<sup>5</sup> I also recommend that the District Court enter FINAL JUDGMENT in both of these

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<sup>5</sup> The same Motion is docketed as No. 17 in the Consolidated Case, C.A. No. 07-007S.

Consolidated Cases (C.A. No. 06-362S and C.A. No. 07-007S) in favor of Defendants as to all claims in Plaintiffs' Complaints.

Any objection to this Report and Recommendation must be specific and must be filed with the Clerk of the Court within ten (10) days of its receipt. See Fed. R. Civ. P. 72(b); LR Cv 72. Failure to file specific objections in a timely manner constitutes waiver of the right to review by the District Court and the right to appeal the District Court's decision. See United States v. Valencia-Copete, 792 F.2d 4, 6 (1<sup>st</sup> Cir. 1986); Park Motor Mart, Inc. v. Ford Motor Co., 616 F.2d 603, 605 (1<sup>st</sup> Cir. 1980).

/s/ Lincoln D. Almond  
LINCOLN D. ALMOND  
United States Magistrate Judge  
October 2, 2007